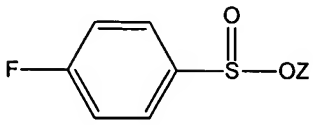
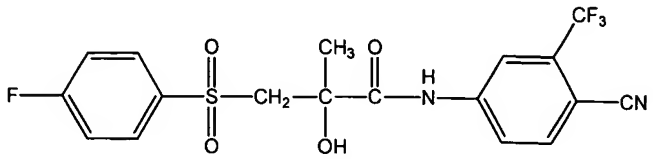
We Claim:

1. A process for making bicalutamide, which comprises reacting a compound of formula (2)



(2)

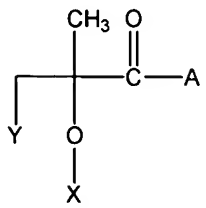
wherein Z represents a cation, with a suitable reaction partner to form a bicalutamide of formula (1):



(1)

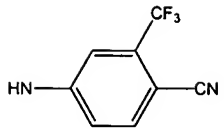
or a non-bicalutamide product and, if said reacting step produces said non-bicalutamide product, then converting said non-bicalutamide product to a bicalutamide of formula (1).

2. The process according to claim 1, wherein said suitable reaction partner is a compound of the formula (3), formula (3.1) or Formula (3.2):

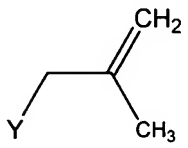


(3)

wherein A represents OR, in which R is a hydrogen, a C_1-C_6 alkyl, a C_3-C_6 cycloalkyl, a phenyl, or a benzyl group; or an aniline derivative of the formula:

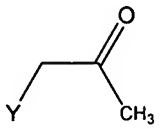


Y represents a leaving group and X represents hydrogen or X and Y join together to form a 3- to 6-membered heterocyclic ring or X and A join together to form a 5- to 10-membered fused or unfused heterocyclic ring with the proviso that if a ring nitrogen is present, it may be substituted by a 3-trifluoromethyl-4-cyano-phenyl group;



(3.1)

wherein Y is as defined for formula (3);



(3.2)

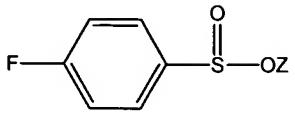
wherein Y is as defined for formula (3).

3. The process according to claim 1, wherein Z is a cation selected from the group consisting of alkali metals, magnesium halides, and ammoniums.

4. The process according to claim 3, wherein Z is a sodium cation.

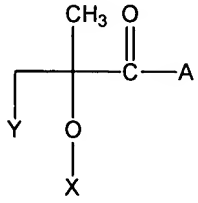
5. The process according to claim 1, wherein said reacting step is carried out in a bi-phasic reaction system or in a lower alcohol.

6. A process, which comprises reacting a compound of formula (2)



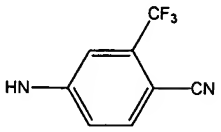
(2)

wherein Z represents a cation; with a compound of formula (3)

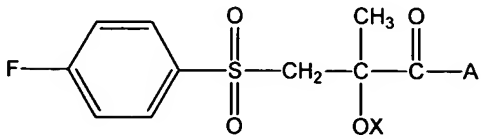


(3)

wherein A represents OR, in which R is a hydrogen, a C_1-C_6 alkyl, a C_3-C_6 cycloalkyl, a phenyl, or a benzyl group; or A represents an aniline derivative of the formula:



Y represents a leaving group and X represents hydrogen or X and Y join together to form a 3- 6-membered heterocyclic ring or X and A join together to form a 5- to 10-membered fused or unfused heterocyclic ring with the proviso that if a ring nitrogen is present, it may be substituted by a 3-trifluoromethyl-4-cyano-phenyl group; to form a compound of the formula (4):



(4)

wherein A and X have the same meaning as in formula (3).

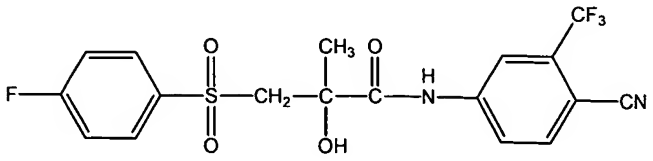
7. The process according to claim 6, wherein Z is a cation selected from the group consisting of alkali metals, magnesium halide, and ammonium.

8. The process according to claim 6, wherein Y represents a halogen or a group of the formula $-OS(O)_2-R^2$, wherein R^2 represents a hydroxyl group, a C_1-C_4 alkyl group, a phenyl group, or an alkyl-substituted phenyl group.

9. The process according to claim 8, wherein Y represents a group selected from the group consisting of iodine, chlorine, bromine, methanesulfonyloxy, and toluenesulfonyloxy.

10. The process according to claim 6, wherein Y and X join together to complete an oxiran ring.

11. The process according to claim 6, wherein A is said aniline derivative and said compound of formula (4) is a bicalutamide of formula (1):



(I)

12. The process according to claim 11, wherein said compound of formula (3) is optically active and said bicalutamide is enriched R-bicalutamide.

13. The process according to claim 11, wherein said produced bicalutamide is racemic bicalutamide and which further comprises isolating the R-bicalutamide isomer therefrom.

14. The process according to claim 11, wherein Y represents a group selected from the group consisting of iodine, bromine, chlorine, methanesulfonyloxy, and toluenesulfonyloxy.

15. The process according to claim 14, wherein Y is bromine or iodine.

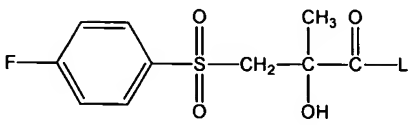
16. The process according to claim 11, wherein Y and X together complete an oxiran ring.

17. The process according to claim 15, wherein Z is a sodium cation.

18. The process according to claim 16, wherein Z is a sodium cation.

19. The process according to claim 6, wherein A is OR.

20. The process according to claim 19, which further comprises converting said compound of formula (4) to a compound of formula (4.1)



(4.1)

wherein L represents a leaving group for an amidation reaction.

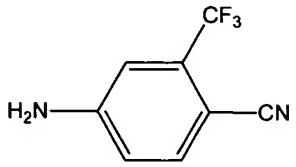
21. The process according to claim 20, wherein L represents a halogen; a group of the formula $-OS(O)_2-R^2$, wherein R^2 represents a hydroxyl group, a C_1-C_4 alkyl group, a phenyl group, or an alkyl-substituted phenyl group; a mixed anhydride group of formula $-O-C(O)-R^3$, wherein R^3 is a C_1-C_4 alkyl group or a phenyl group, each optionally substituted by one or more halogens; or an activated ester group.

22. The process according to claim 21, wherein R^3 represents a group selected from the group consisting of trifluoromethyl, tert-butyl, isobutyl and o-dichlorophenyl group.

23. The process according to claim 21, wherein L represents a halogen or a group of the formula $-OS(O)_2-R^2$, wherein R^2 represents a hydroxyl group, a C_1-C_4 alkyl group, a phenyl group, or an alkyl-substituted phenyl group.

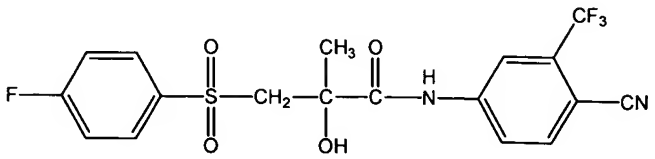
24. The process according to claim 23, wherein L represents a group selected from the group consisting of bromine, chlorine, methanesulfonyloxy, and toluenesulfonyloxy.

25. The process according to claim 20, which further comprises reacting said compound of formula (4.1) with an amine of the formula (11):



(11)

to form a bicalutamide of formula (1):

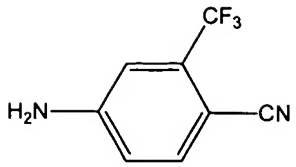


(I)

26. The process according to claim 25, wherein said compound of formula (3) is optically active and said bicalutamide is enriched R-bicalutamide.

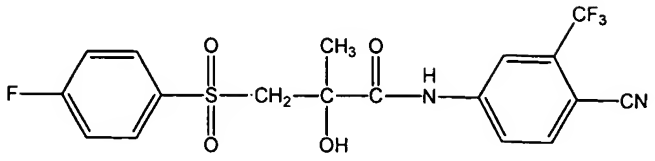
27. The process according to claim 25, wherein said produced bicalutamide is racemic bicalutamide and which further comprises isolating the R-bicalutamide isomer therefrom.

28. The process according to claim 19, which further comprises reacting said compound of formula (4) with an amine of the formula (11):



(11)

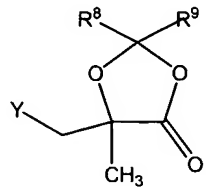
to form a bicalutamide of formula (1):



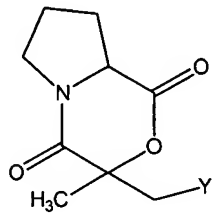
(I)

29. The process according to claim 28, wherein A represents hydrogen.

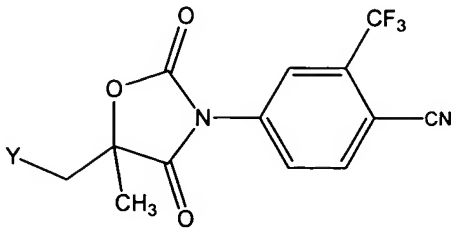
30. The process according to claim 6, wherein X and A together complete a ring to form a compound selected from the following formulae 3A-3C:



3A



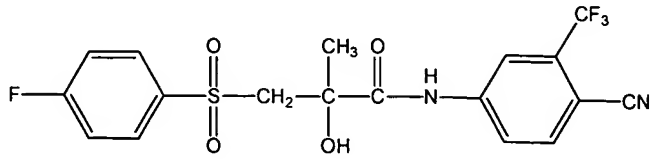
(3B)



(3C)

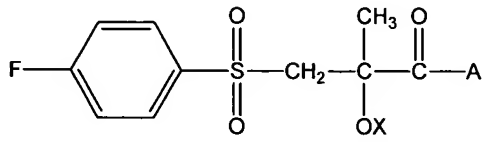
wherein R^8 represents a hydrogen, an C_1-C_6 alkyl or a C_3-C_6 cycloalkyl; R^9 represents a C_1-C_6 halogenated alkyl; and Y is as defined for formula (3).

31. The process according to claim 30, which further comprises hydrolyzing said compound of formula (4) and forming a bicalutamide of formula (1):



(1)

32. A compound of the formula (4):



(4)

wherein A represents OR, in which R is a C_1-C_6 alkyl, a C_3-C_6 cycloalkyl, a phenyl, or a benzyl group; X represents hydrogen or X and A join together to form a 5- to 10-membered fused or unfused heterocyclic ring with the proviso that if a ring nitrogen is present, it may be substituted by a 3-trifluoromethyl-4-cyano-phenyl group.